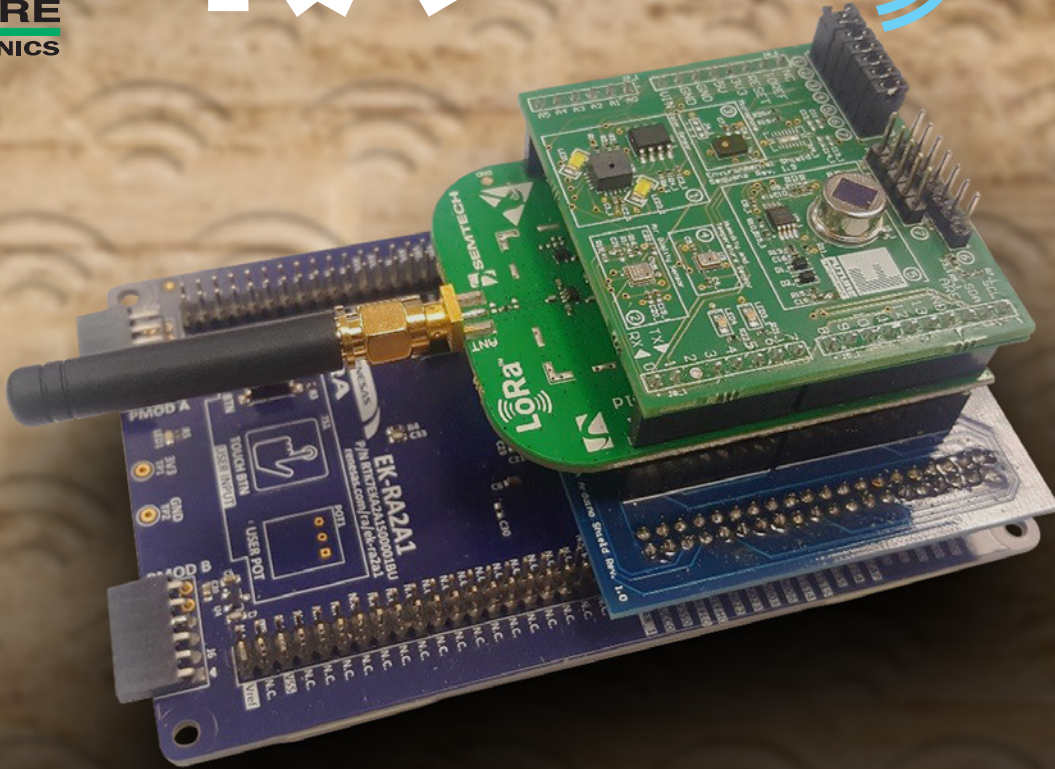




New from Future Electronics

RAMESSES



RamesSES, the sensor-rich evaluation and learning platform for Renesas RA family 32-bit microcontrollers

Future Electronics' RamesSES platform includes:

- MCU board and Arduino connector board
- Environmental sensor board
- LoRa® wireless networking board
- Firmware interface to included FreeRTOS™
- Application software for sensor data acquisition and LoRa® communication

Online training module gets designers started immediately on realistic application scenarios

Future Electronics' RamesSES platform is a complete evaluation system which enables developers to experience the strong embedded security, high performance and low-power operation of the Renesas RA family of MCUs.

Fully supported by the Renesas Flexible Software Package (FSP), the RamesSES platform is the basis for online webinars which lead designers through configuration of the FreeRTOS™ operating system, processing data from the Sequana Environmental sensor board, and communicating sensor data wirelessly via the LoRa® transceiver board.



ENQUIRE FOR MORE INFORMATION ON RAMESSES PLATFORM AND TRAINING MODULE

RamesSES platform is supplied to pre-qualified customers of Future Electronics.
For more information, contact your local branch or visit: www.my-boardclub.com.

Ramesses platform: the fastest way to learn about application development on the Renesas RA family of microcontrollers

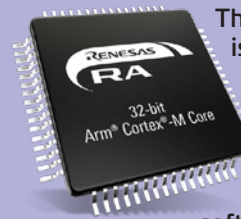


The Ramesses platform gives design engineers a rich operating environment in which to evaluate the Arm® Cortex®-M core-based Renesas RA family of microcontrollers and the Renesas Flexible Software Package (FSP), which provides a quick and versatile way to build secure connected IoT devices using the Renesas RA family.

The Ramesses hardware consists of:

- EK-RA2A1 development board for the Renesas RA2A1, an MCU based on a 48MHz Arm® Cortex®-M23 core and including a 24-bit sigma-delta ADC and a 16-bit successive-approximation ADC
- Arduino adaptor shield for the addition of expansion boards
- Future Electronics Sequana Environmental board, which features multiple sensors including the Renesas ZMOD4410 air quality sensor and the HS3001 relative humidity and temperature sensor
- Semtech SX1272MB2DAS, a low-power wide-area networking shield board based on Semtech's LoRa® SX1272 transceiver IC

About the RA family of MCUs



The Renesas RA family is a broad portfolio of low-power, 32-bit microcontrollers which share a common set of run-time software components and software development tools.

RA family MCUs are based on an Arm Cortex-M33, -M23 or -M4 processor core and are certified compliant with the Arm Platform Security Architecture.



Unique Future Electronics training module for Renesas RA family MCUs

Users of the Ramesses platform can access a series of online video tutorials provided by Future Electronics, which take the engineer through the steps required to start using the capabilities of the platform.

The **first online workshop** shows the user how to configure the FreeRTOS™ operating system, and how to set up interrupts and read data from the HS3001 sensor.

The **second workshop** shows how to interface to the Sequana Environmental board's ZMOD4410 air quality sensor, and how to use semaphores and handle a high number of interrupts.

The **third workshop** explains how to connect the Ramesses platform to a LoRaWAN® long-range wireless networking gateway, and send sensor data to a remote application server.



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